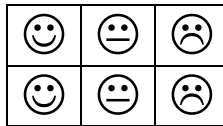
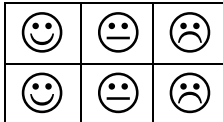


SIMILAR SHAPES

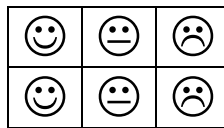
A: I can enlarge and reduce shapes



B: I can describe and check when two shapes are similar



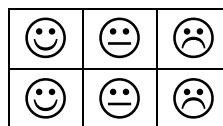
C: I can calculate a scale factor of reduction or enlargement from two similar shapes



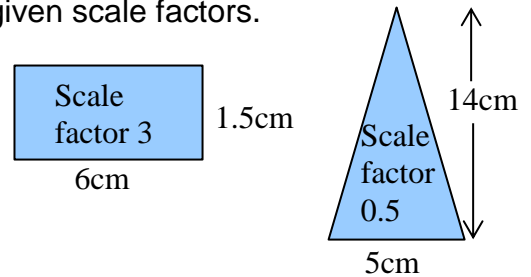
D: I can calculate missing dimensions in similar shapes



E: I can prove that two triangles are similar



Enlarge or reduce these shapes by the given scale factors.

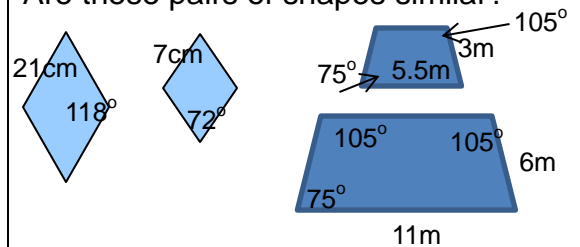


Shapes are similar if:-

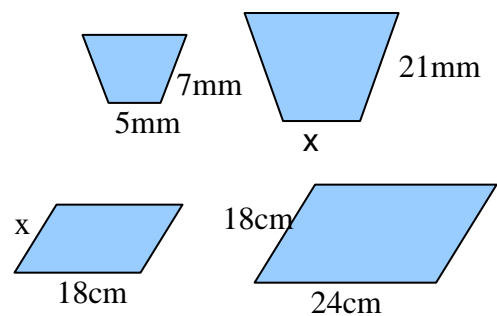
1) corresponding angles are

2) corresponding sides are

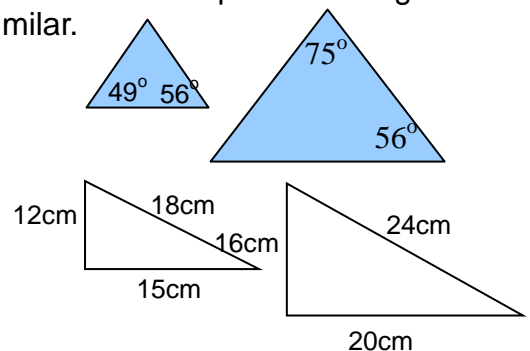
Are these pairs of shapes similar?



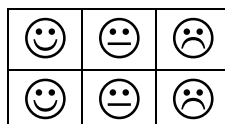
Calculate the scale factor in these similar shapes and calculate x in the following:-



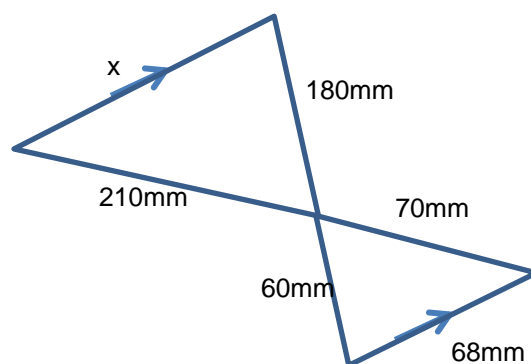
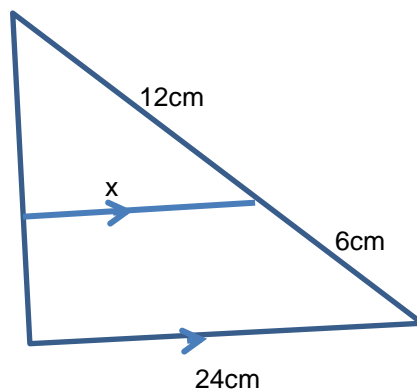
Show that these pairs of triangles are similar.



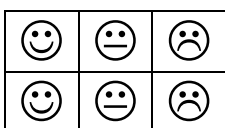
F: I can calculate missing dimensions in similar triangles



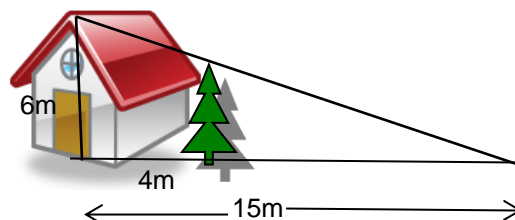
Calculate x in the following:-



G: I can solve problems involving similar shapes

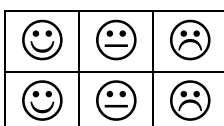


A house is 6 metres high. A tree is 4 metres from the house. From 15 metres away from the house the top of the tree is in line with the top of the house. Calculate the height of the tree.

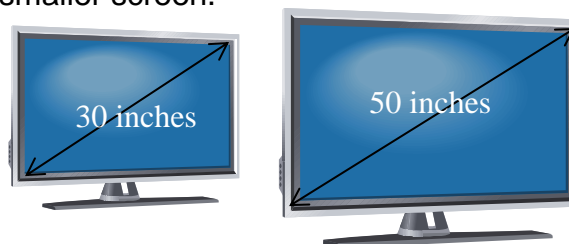


Would the tree hit the house if it fell?

H: I can calculate the areas of similar shapes using linear scale factors



These two TV screens are similar. Calculate the area covered by the smaller screen.

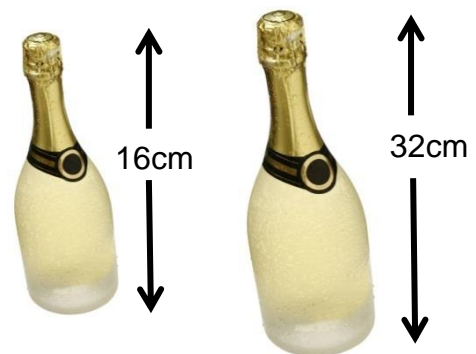


Area of large screen = 1200 square inches

I: I can calculate the volumes of similar shapes using linear scale factors



These two bottles are similar.
Calculate the volume of the larger bottle.



The volume of the smaller bottle is 187.5ml

